Amphibious Ship Programs 20 MAY 2007

Amphibious Ship Programs Section

POE-50, PP&O

Amphibious Ship

- Amphibious Lift – Shipbuilding Position
- Programs:
  - LPD 17
  - LHD 8
  - LHA 6
  - Current Ship Inventory
  - LCAC SLEP / SSC / JMAC
  - LCU R
- Other Related: LF Baseline, ALEP & 2007 MEB

Amphibious Ship – MPF(F) Shipbuilding Position

- The Marine Corps operational lift requirement (minimum) is 2.0 amphibious MEB Assault Echelons and 1.0 MPF(F) and Legacy MPSRONs*.
- A total of 30 Operational Available (Ao) amphibious ships (i.e., 10 Ao LHD-1/LHA-6 Class Ships, 10 Ao LPD-17 Class Ships, and 10 Ao LSD 41/49 Class Ships) are required to support the 2 MEB Assault Echelon forcible entry force directed by the Strategic Planning Guidance (SPG). The actual number of fleet ships must be larger than 10-10-10, since not all ships will be operationally available at any one time.

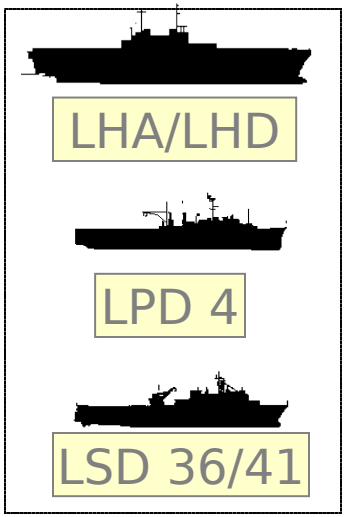
- MPF(F) is not assault echelon shipping
  - MPF(F) does not have the same level II survivability as AE ships
  - MPF(F), in combination with necessary sea shield and assault echelon ATF assets, is capable of conducting/assisting with operations in semi- or non-permissive situations

BASELINE MEB

Amphibious Fleet Transformation

Operations from 1- 5 miles off beach → **Sea Based Operations from 25+ miles**

1990



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First Class Warships

Enable Operational Maneuver From The Sea and Ship To Objective Maneuver

Enhanced Capabilities:

- **Seabasing Platforms**
- **LCAC, EFV**
- **MV-22, JSF**
- **Improved Self-Defense**
- **Improved C4I**

2015

LHA/LHD/LHA(R)

LSD 41/49

LPD 17

Comparison With Existing Amphibs

	LPD 17	LPD 4	LHD1	LHA
LENGTH (FT)	684	570	844	820
BEAM (FT)	105	84	106	106
FULL LOAD DRAFT (FT)	23	23	26.7	26.7
FULL LOAD DISPL. (LT)	24,900	16,905	40,538	39,400
PROPULSION PLANT	DIESEL	STEAM	STEAM *	STEAM
SUSTAINED SPEED (KTS	22	21	22	22
VEHICLE SQUARE (FT^2)	25K	11.8K	20.9K	25.4K
CARGO VOLUME (FT^3)	34K	38.3K	125K	105.9K
TROOPS	720	788	1,687	1,710
LCAC	2	1	3	1
LANDING SPOTS	4	2	9	10
CREW	361	420	1,247	1,204
MEDICAL CAPABILITY	24 BEDs/2 ORs	12 BEDs/1 OR	64 BEDs/6 ORs	18 BEDs/ 6ORs
MOGAS CAPABILITY (GAL)	3,000**	22,300	0	9,000

- LHD 8 will have gas turbine propulsion.
- LPD-17 MOGAS reduced to 3000

LPD 17 Ship Snapshot

- **Test and Trial Milestones**
  - Delivery
  - Crew Move Aboard
  - Sail Away Trial
  - Sail Away
- **Commissioning**
- **Transit to Homeport**
- **Fitting Out Availability**

SAN ANTONIO (LPD-17)

NEW ORLEANS (LPD-18)

LPD 17 Class Ship Snapshot

LPD 19, LPD 22, LPD 23, and LHD8 were the amphibs affected by the union strike (Ingalls/Pascagoula ships); LPD 20 and other Avondale ships were not affected.

- **USS SAN ANTONIO (LPD-17). Delivered, Commissioned and at homeport.**
  - **PSA during summer 2007.**
  - **Conduct Opeval during late 2007/early 2008.**
  - **Deploy 2008**
- **USS NEW ORLEANS (LPD-18). Delivered, Commissioned and at homeport.**
  - **To conduct fitting out availability this Spring/Summer.**
  - **To commence Post Delivery Test and Trials afterwards.**
- **USS MESA VERDE (LPD-19). Delivery and commissioning in 2007.**
  - **Commissioning Site: commissioning site has been approved: Panama City, FL.**
- **USS GREENBAY (LPD-20) and USS NEW YORK (LPD 21) under construction with tentative FY08 delivery dates.**
- **Contract for LPDs 22 / 23 (with options for 24/25) awarded June 2006.**
- **Contract option for the construction of LPD 24 was exercised and the procurement of long lead time materiel for LPD 25 in Nov 06.**

Post Delivery Test & Trials

– First of Class Trials/Certifications
– Combat System Ship Qualification Testing (CSSQT)
– Developmental Testing (DT)
– Crew Basic Phase Training
– Final Contract Trial
– OPEVAL
– Total Ship Survivability Test
– LCAC Interface Trials
– Post Shakedown Availability
– Intermediate/Advance Phase Trai

LPD 17 Class Hurricane Impact

- **Hurricane impacted NGSS shipyards**

Ingalls: **Facility flooded 5-10 ft of water** **Avondale:**
Localized flooding

Significant wind damage	**Minor wind damage**
Electrical power grid damaged	**Major workforce displacement**
Core functions destroyed	
Lost material	

- **Productivity disruption, schedule delays, and loss of skilled labor driving increased labor and overhead costs**
  - **Electricians, Pipefitters, and Machinery trades have greatest impact**

- **Workforce**
  - **Wage competition with FEMA/other business sectors**
  - **Nearing 70% return to date**
  - **NGSS assessing options to maintain workforce**

- **NGSS has provided the Navy an initial assessment of impact to ship construction schedules across all NGSS facilities**
  - **Navy is currently reviewing this assessment**
    - **Near term focus on setting schedules for LPD 18 and 19**

Katrina Shipbuilding Impact

LPD HULL	PRE-STORM DELIVERY	POST-STORM DELIVERY
LPD-17	07/05	NO IMPACT
LPD-18	1/06	12/06
LPD-19	03/06	03/07
LPD-20	10/06	12/07
LPD-21	8/07	04/08
LPD-22-25	NOT PROGRAMMED	NO IMPACT
LHD-8	7/07	Mid-08

LPD-18 Commissioned on 10 Mar 07 in New Orleans, LA.

LPD-19 Proposed Commissioning on 30 Jun 07 in Panama City, FL.

LHD-8 *Makin Island*

- LHD 8 will replace LHA-3.
- Start of Construction: 22 May 03
- Christening Ceremony 19 Aug 2006
- Delivers mid-2008; construction schedule affected by Katrina.
- Major changes: Elimination of steam through the introduction of gas turbine propulsion and all-

LHA 6

- **The last of the five TARAWA class LHAs reach the end of it's service life in 2015***
- **LHD-8 will replace LHA-3 upon delivery in 2008**
- **LHA(R) program replaces the remaining 4 LHAs.**

Concepts and Programs "Refining the program of record to a more affordable platform with maximum warfighting capability."

rent Long Range Shipbuilding Plan calls for it to remain in service until 2018

Capability Comparison
LHA vs. LHD vs. LHA(R)

Requirements	LHA	LHD	LHA(R) **(LHA 6)**
Aviation: JSF	**0**	**19**	**23**
Aviation Maint (MV22)	**Limited**	**Limited**	**Full (2 MV22)**
Cargo (K cubic ft)	**109**	**125**	**160**
Vehicle (K square ft)	**25.4**	**20.9**	**11.6**
Troops	**1,713**	**1,686**	**1,686**
Well Deck Spots (LCAC)	**1**	**3**	**0**
JP-5 (K gallons)	**400**	**617**	**1,300**
Sustained Speed (kts)	**22**	**22**	**22**
Survivability (armor)	**None**	**Limited**	**Add'l**

CAPABILITY VALIDATED BY JROC ON FEBRUARY 8, 2005

JROCM validated revised aviation, survivability and force protection KPPs on December 19, 2005

Amphibs
East Coast /Atlantic

- ~~SAIPAN (LHA 2)~~ ~~Decomm 27 Apr 07~~
- NASSAU (LHA 4)
- WASP (LHD 1)
- KEARSARGE (LHD 3)
- BATAAN (LHD 5)
- IWO JIMA (LHD 7)
- ~~AUSTIN (LPD 4)~~ ~~Decomm 27 Sep 06~~
- SHREVEPORT (LPD 12) Decomm 28 Sep 07
- NASHVILLE (LPD 13)
- ~~TRENTON (LPD 14)~~ ~~Decomm 17 Jan 07~~
- PONCE (LPD 15)
- SAN ANTONIO (LPD 17)
- WHIDBEY ISLAND (LSD 41)
- GUNSTON HALL (LSD 44)
- ASHLAND (LSD 48)
- CARTER HALL (LSD 50)
- OAK HILL (LSD 51)

Amphibs
West Coast/Pacific

- TARAWA (LHA 1) Decomm FY09
- PELELIU (LHA 5)
- ESSEX (LHD 2) *
- BOXER (LHD 4)
- BONHOMME RICHARD (LHD 6)
- ~~OGDEN (LPD 5) Decomm Feb 07~~
- CLEVELAND (LPD 7) Decomm FY08
- DUBUQUE (LPD 8) Decomm FY12
- DENVER (LPD 9) Decomm FY11
- JUNEAU (LPD 10) * Decomm FY09
- USS NEW ORLEANS (LPD 18)
- GERMANTOWN (LSD 42)
- FT MCHENRY (LSD 43) *
- COMSTOCK (LSD 45)
- TORTUGA (LSD 46) *
- RUSHMORE (LSD 47)
- HARPERS FERRY (LSD 49)
- PEARL HARBOR (LSD 52)

*FDNF – Sasebo

Shipbuilding/Procurement

- **LHD 8 MAKIN ISLAND Deliver FY08**
- **LPD 19 MESA VERDE Deliver Summer 07**
- **LPD 20 GREEN BAY Deliver Dec 07**
- **LPD 21 NEW YORK Deliver Apr 08**
- **LPD 22 SAN DIEGO Deliver Jun 10**
- **LPD 23 ANCHORAGE Deliver Oct 10**
- **LPD 24 ARLINGTON Deliver FY 11**
- **LPD 25 SOMERSET Deliver FY 11**

Commissionings are scheduled approximately 3 months after delivery.

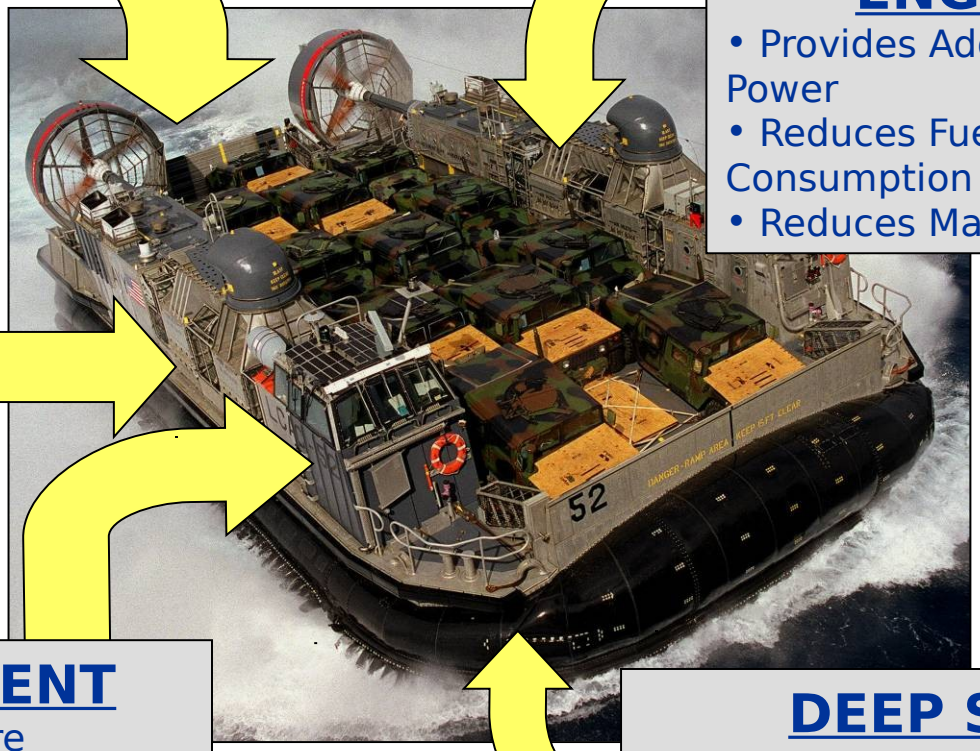
Program Overview
LCAC SLEP

BUOYANCY BOX REFURBISHMENT

- Addresses Corrosion Problem
- 20-Year Service Life
- Incorporates Hull Upgrades and

ROTATING MACHINERY REFURBISHMENT

- Extends Useful Life of Equipment
- Reduces Maintenance



ENHANCED ENGINES

- Provides Additional Power
- Reduces Fuel Consumption
- Reduces Maintenance

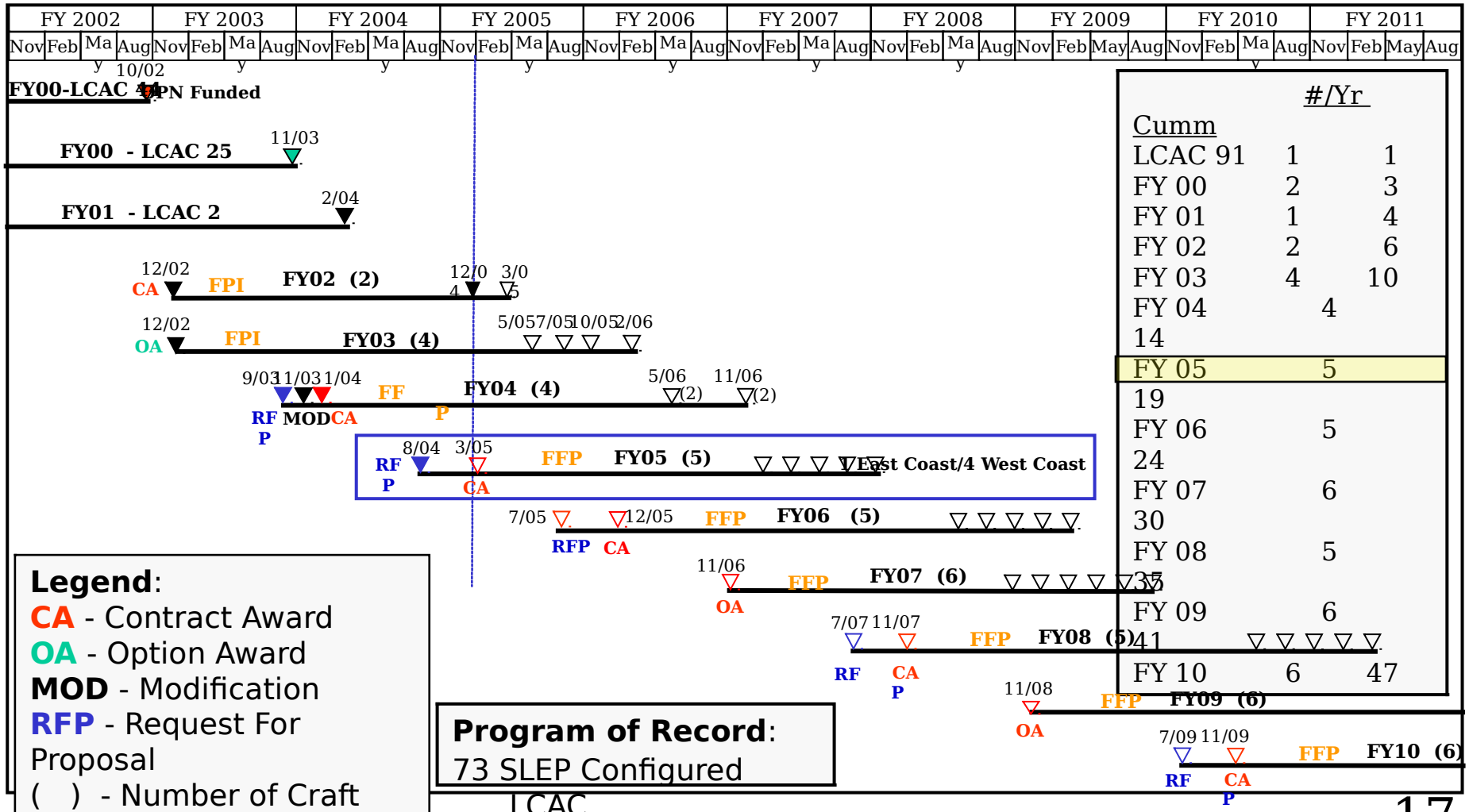
C4N REPLACEMENT

- Introduces Open Architecture
- Introduces Modern COTS Equipment
- Provides Precision Navigation
- Provides Common Tactical Picture
- Provides Comm Suite Interoperability

DEEP SKIRT

- Reduces Drag
- Increases Performance Envelope
- Reduces Maintenance
- Increases Obstacle

LCAC SLEP Planning, Installation, and Delivery

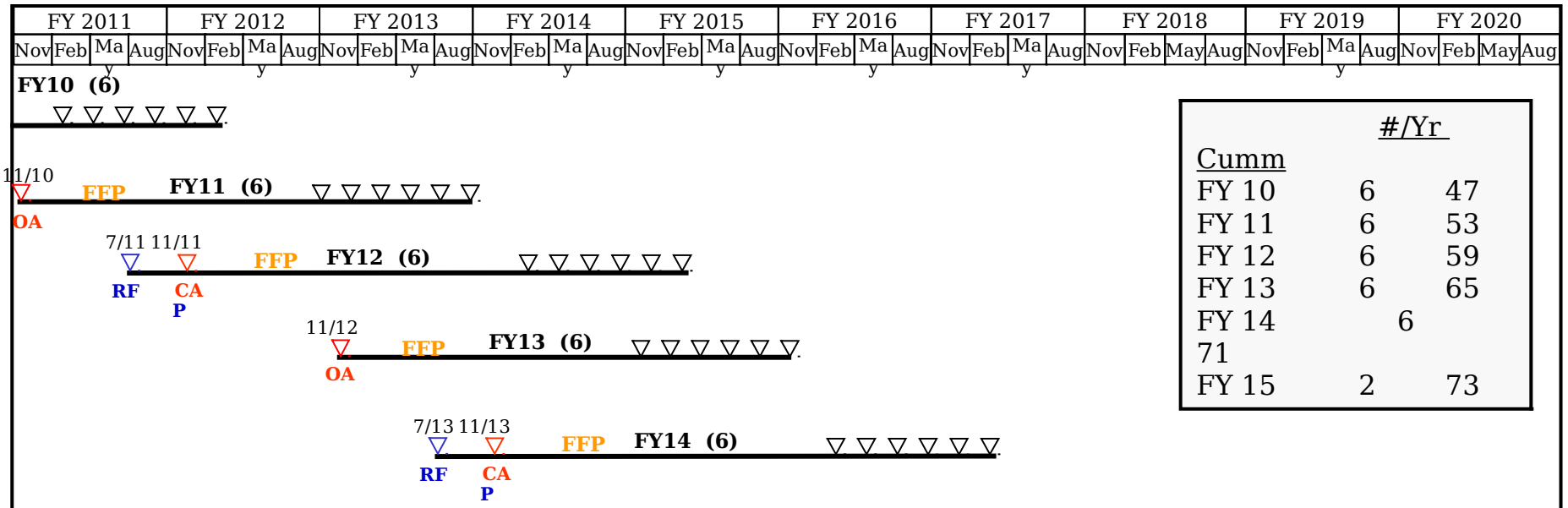


	#/Yr	Cumm
LCAC 91	1	1
FY 00	2	3
FY 01	1	4
FY 02	2	6
FY 03	4	10
FY 04	4	14
FY 05	5	19
FY 06	5	24
FY 07	6	30
FY 08	5	35
FY 09	6	41
FY 10	6	47

Legend:
CA - Contract Award
OA - Option Award
MOD - Modification
RFP - Request For Proposal
( ) - Number of Craft

Program of Record:
73 SLEP Configured LCAC

LCAC SLEP Planning, Installation, and Delivery



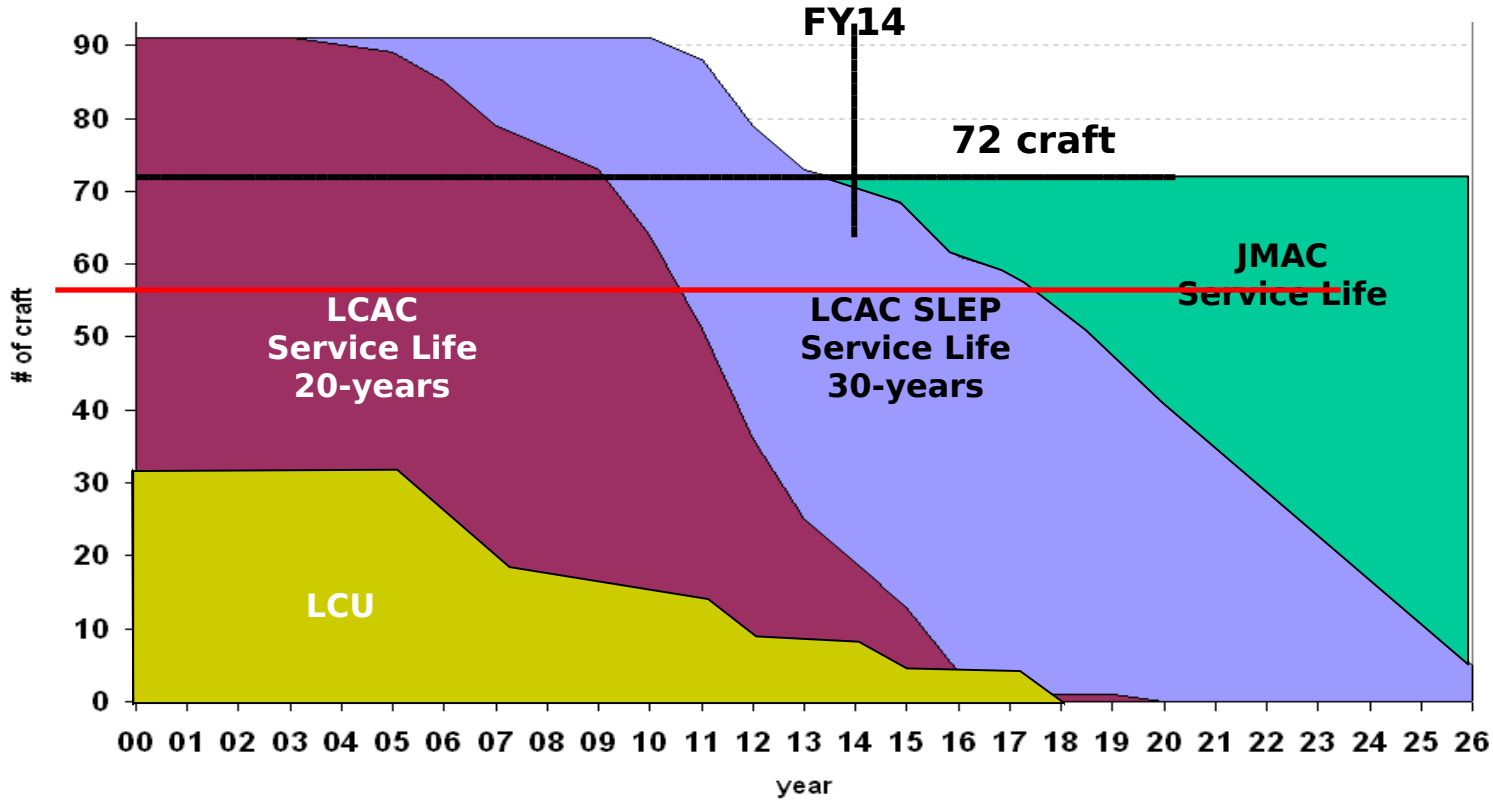
	#/Yr	Cumm
FY 10	6	47
FY 11	6	53
FY 12	6	59
FY 13	6	65
FY 14	6	71
FY 15	2	73

Legend:
CA - Contract Award
OA - Option Award
MOD - Modification
RFP - Request For Proposal
( ) - Number of Craft

Program of Record:
73 SLEP Configured

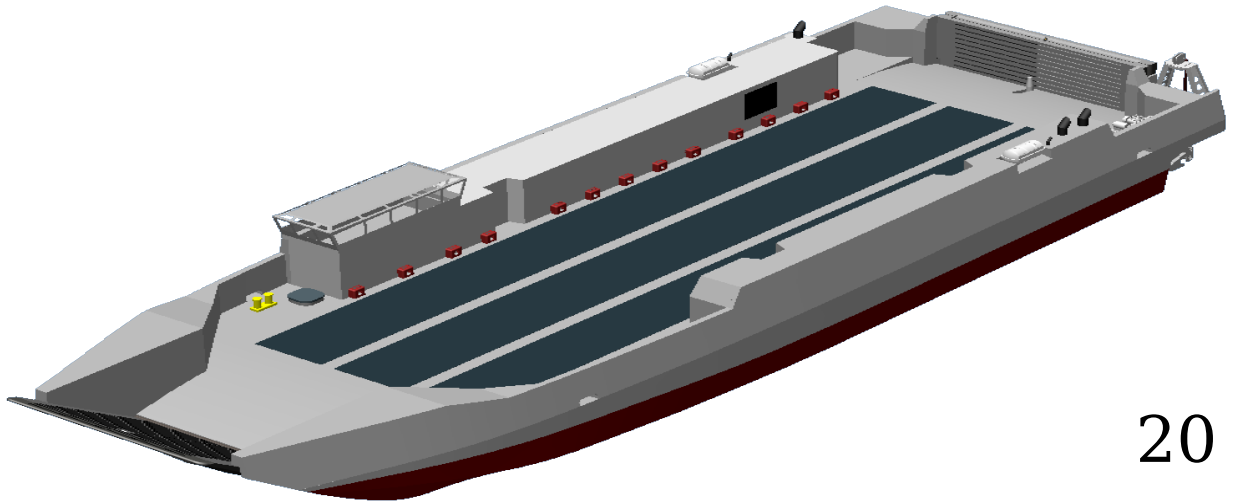
Ship to Shore Connector (Joint Maritime Assault Craft)

- JMAC required to fill future gaps that the end of LCAC and LCAC SLEP Service Life will create
  - Key to future Joint surface assault and sustainment



LCU (R)

- **Current craft 12 – 24 yrs past ESL**
- **Performance and readiness degrading with age**
- **Current LCU wastes Well Deck space**
- **Current LCU is subject to broaching due to poor maneuverability**
- **Communications suite outdated and non-interoperable**



LANDING FORCE OFFICE SPACES BACKGROUND

- **APR 04 – MARFORLANT SUBMITTED LHD C2I SPACE CONFIG CONF**
- **OCT 05 – SCD-187 APPROVED TO ADDRESS MARFORLANT C2I RECOM**
- **APR 06 – 26 MEU MAGTF SPACE UPGRADES FOR BATAAN ESG**
- **JUN 06 – MARFORCOM ENDORSEMENT OF 26 MEU SPACE UPGRADES**
- **AUG 06 – 22 MEU ASSESSMENT OF AMPHIB SHIPPING**

DEMAND SIGNALS FOR PROCESS

DEVELOPING THE BASELINE

- **IN ORDER TO AFFECT CHANGES / MODIFICATIONS, A UNIFORM STANDARD MUST BE DEVELOPED AND SCD'S SUBMITTED.**
  - **Develop an Interim Policy for approval of ship modification/change requests.**
  - **Staff the Baseline.**
  - **Incorporate Baseline into SCDs.**
  - **Provide a Process on how to incorporate future required capabilities into SCDs.**

THE WAY AHEAD WILL INCORPORATE SCD'S FOR EACH SHIP CLASS

AMPHIBIOUS LIFT ENHANCEMENT PROGRAM (ALEP)

- **ALEP established in 1994 to address Congressional concern over USN inability to meet USMC amphib lift requirement of 3.0 MEB, fiscally constrained to 2.5 MEB**
- **Designed to fill gap in vehicle square until the LPD-17 class delivered**
- **Original ALEP Inventory was 11 Amphibious ships:**
  - **2 x LKA's with MSC crew, surge in five days (ROS 5)**
  - **3 x LKA's and 4 x LST's in mobility category B (180 days)**
  - **2 x LST's, one per coast assigned to Naval Reserve Force**
    - **Manning plan: 5 LKA reserve crews rotated training on the two ROS 5 LKA's. Each NRF LST required three reserve crews.**

2007 MEB

Purpose of the MEB is to develop a current

echeloned lift estimate that identifies the assault

force capabilities required for the AE within the

first five days (D+5) and identifies the assault

follow-on echelon that arrives NET D+5.

Amphibious Programs

Expeditionary Warfare Ship Inventory (POM08 Data + FY07 30 Yr Shipbuilding Plan)

DRAFT (as of 8/14/2006)

Legend (note 1)

- 1 Delivery
- X Decommissioning
- PR07 Plan
- P Procurement year
- End of service life (OPNAV N8 Memo Sep 98)

- 1 West Coast
- 1 East Coast
- 1 FDNF
- 1 TBD

Notes

1. Totals for ship classes based on number of ships in service at end of fiscal year.
2. POM 08 Change
3. MPF(F) LHD to be transferred from Active Amphib fleet in 2021 (Specific hull not official, LHD 5 notional placeholder)

Fiscal Year	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
LHA	4	3	3	2	2	2	3	3	3	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1 TARAWA (note 2)	1	1	1	X																										
2 SAIPAN	1	X																												
3 BELLEAU WOOD	X																													
4 NASSAU	1	1	1	1	1	1	1	1	1	X																				
5 PELELIU	1	1	1	1	1	1	1	1	1	1	1	1	X																	
6 LHA		P					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7 LHA												P					1	1	1	1	1	1	1	1	1	1	1	1	1	1
LHD (note 3)	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1 WASP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
2 ESSEX	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
3 KEARSARGE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
4 BOXER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5 BATAAN (note 3)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	MPF													
6 BONHOMME RICHARD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7 IWO JIMA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8 MAKIN ISLAND			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
LHD(X) Procurement																			P			P	P		P		P	P		
LHD(X)) Delivery																								1	1	1	2	3	3	4
LPD-4 (End of ESL)	9	8	5	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 AUSTIN (2000)	X																													
5 OGDEN (2000)	1	X																												
6 DULUTH (2000)																														
7 CLEVELAND (2002)	1	1	X																											
8 DUBUQUE (2002)	1	1	1	1	1	1	X																							
9 DENVER (2003)	1	1	1	1	1	X																								
10 JUNEAU	1	1	1	X																										
12 SHREVEPORT	1	X																												
13 NASHVILLE	1	1	1	1	X																									
14 TRENTON	1	X																												
15 PONCE	1	1	1	1	1	1	1	X																						
LPD-17	1	3	5	6	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
17 SAN ANTONIO	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18 NEW ORLEANS		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19 MESA VERDE		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20 GREEN BAY			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21 NEW YORK			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22 SAN DIEGO				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23 ANCHORAGE						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24 ARLINGTON	P					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25 SOMERSET			P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
LSD	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
41 WHIDBEY ISLAND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X												
42 GERMANTOWN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X											
43 FT. MCHENRY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X										
44 GUNSTON HALL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X									
45 COMSTOCK	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X								
46 TORTUGA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X							
47 RUSHMORE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X						
48 ASHLAND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X					
49 HARPERS FERRY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X				
50 CARTER HALL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X			
51 OAK HILL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X		
52 PEARL HARBOR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	
LSD(X) Procurement													P			P	P	P	P	P	P	P	P	P	P	P				
LSD(X) Delivery																		1	1	2	3	4	5	6	7	8	9	10	11	12
Total Big-Deck	11	10	11	10	10	10	11	11	11	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Total LPD	10	9	10	9	9	11	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Total LSD	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Total Amphibious Ships	33	31	33	31	31	33	33	32	32	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

Expeditionary Warfare Ship Inventory (POM08 Data + FY07 30 Yr Shipbuilding Plan)

DRAFT (as of 8/14/2006)

Legend (note 1)

- 1 Delivery
- X Decommissioning
- PR07 Plan
- P Procurement year
- End of service life (OPNAV N8 Memo Sep 98)
- 1 West Coast
- 1 East Coast
- 1 FDNF
- 1 TBD

Notes

1. Totals for ship classes based on number of ships in service at end of fiscal year.
2. POM 08 Change
3. MPF(F) LHD to be transferred from Active Amphib fleet in 2021 (Specific hull not official, LHD 5 notional placeholder)

Fiscal Year	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
MPF (Future)	0	0	0	0	0	0	1	3	5	9	10	10	11	11	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12
MPF(F) LHA(R)	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1 MPF(F) LHA(R)					P					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 MPF(F) LHA(R)								P	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MPF(F) LHD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1 MPF(F) LHD																	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MPF(F) LMSR	0	0	0	0	0	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1 MPF(F) LMSR					P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 MPF(F) LMSR						P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 MPF(F) LMSR							P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MPF(F) T-AKE	0	0	0	0	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1 MPF(F) T-AKE				P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 MPF(F) T-AKE					P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 MPF(F) T-AKE						P			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MLP	0	0	0	0	0	0	0	0	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1 MLP				P						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 MLP						P				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 MLP							P				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
LEGACY	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1 LEGACY SQDN (MPF)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 LEGACY SQDN (MPF)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MPSRON Ships	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
SURF ASLT	110	105	105	105	105	105	101	92	90	84	75	80	80	64	62	61	58	56	54	52	51	52	54	58	62	62	62	62	62	62
LCAC	82	82	82	82	82	82	80	72	70	68	60	58	54	48	40	35	28	22	18	10	5	2	X							
LCAC(X)											3	10	14	18	22	26	30	34	38	42	46	50	54	58	62	62	62	62	62	62
LCU	28	23	23	23	23	23	21	20	20	16	12	12	12	X																
MINE WARFARE SHIPS	22	18	14	14	14	14	14	14	14	14	14	12	10	8	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
MHC	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51 OSPREY	X																													
52 HERON	1	X																												
53 PELICAN	1	X																												
54 ROBIN	X																													
55 ORIOLE	X																													
56 KINFISHER	1	1	X																											
57 CORMORANT	1	1	X																											
58 BLACK HAWK	1	1	X																											
59 FALCON	X																													
60 CARDINAL	1	X																												
61 RAVEN	1	X																												
62 SHRIKE	1	1	X																											
MCM	14	14	14	14	14	14	14	14	14	14	14	12	10	8	6	4	2	0												
1 AVENGER	1	1	1	1	1	1	1	1	1	1	1	X																		
2 DEFENDER	1	1	1	1	1	1	1	1	1	1	1	X																		
3 SENTRY	1	1	1	1	1	1	1	1	1	1	1		X																	
4 CHAMPION	1	1	1	1	1	1	1	1	1	1	1		X																	
5 GUARDIAN	1	1	1	1	1	1	1	1	1	1	1		1	X																
6 DEVASTATOR	1	1	1	1	1	1	1	1	1	1	1		1	X																
7 PATRIOT	1	1	1	1	1	1	1	1	1	1	1		1	1	X															
8 SCOUT	1	1	1	1	1	1	1	1	1	1	1		1	1	X															
9 PIONEER	1	1	1	1	1	1	1	1	1	1	1		1	1	1	X														
10 WARRIOR	1	1	1	1	1	1	1	1	1	1	1		1	1	1	X														
11 GLADIATOR	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	X													
12 ARDENT	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	X													
13 DEXTROUS	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	X												
14 CHIEF	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	X												
HSV	0	0	0	0	0	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1 JHSV				P		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2 JHSV					P		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 JHSV						P		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1